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ITEM OF JEWELRY WITH CHANGEABLE DECORATION

The present invention concerns a piece of jewelry with a transformable design.

5 It relates more particularly to jewelry in the form of a ring, broach, earring or like items, carrying decorative elements whose color can be modified to be harmonized with an outfit or the desires of the person wearing the jewelry.

10 There is an already established technique, as described in patent FR 1 381 490, a ring or similar item fitted with a setting carrying at least two decorative elements that is mounted so that it pivots between the two edges of the opening of the ring's body in the shape of a split ring so that it provides users with the option of two or more displays.

15 Such a piece of jewelry, although satisfying, is inconvenient in that it necessitates its removal from the finger so as to position another decorative design.

20 The purpose of the invention is to propose a piece of jewelry with a transformable design which remedies the above inconvenience and to provide new appeal for transformable jewelry.

25 In order to do so, the present invention concerns a piece of jewelry consisting of a ring setting supporting precious stones and/or any other decorative design, characterized in that the supporting setting is surmounted by an ornament shaped so that it hides only certain parts of the stones and/or of the decorative design of the setting and fitted with a mechanism which allows it to pivot about the axis perpendicular to the face of the setting as well as to lock automatically at each stage of the piece's rotation.

As one of the design's advantageous characteristics, the supporting setting is fitted with different sectors of precious stones and/or designs so that the size and shape of each sector is similar to each of the protruding parts of a central ring which composes the ornament.

Another feature is that the ornament is fitted with at least one protruding part so as to hide at least one of the sectors that are arranged in a regular way about the setting.

Yet another advantageous characteristic, the protruding parts of the ornament are fitted with precious stones and/or decorative designs.

In this invention, the mechanism responsible for pivoting and automatic locking is composed of an axis, made of a nut located at the center of the ornament, of a bolt, of an elastic element intended to fasten the ornament to the setting, and of a locking system to stop the rotation at each sector. The locking system is composed of a notch and of juxtaposed slopes arranged on the setting and work using "V"-shaped ridges of the ornament that are able to seat themselves into a notch, and, under the force of the elastic element stop rotation.

In another variant of the design, the mechanism responsible for pivoting and automatic locking of the ornament consists of two cylindrical pieces mounted coaxially, one of which is attached to the setting, the other attached to the ornament, and both axially fixed by a clip such that the free rotation of one of the cylindrical portions relative to the other is resisted by the presence of an elastic element protruding from the body of the cylindrical portion of the ornament so that it is seated onto each sector of precious stones and/or design of the setting.

The above mentioned characteristics of the invention, as well as others, will appear more clearly upon reading the following description of a sample assembly, by referring to the attached figures, on which:

5           - Figure 1 is a perspective view of a transformable ring constructed according to this invention.

          - Figure 2 is an exploded perspective view of the ring in Figure 1.

10           - Figures 3a and 3b are top-down views of rings illustrating different variants of the invention's assembly, and

          - Figure 4 is a cut-away partial view of a ring showing an assembly variant of the invention.

15           Figures 1 and 2 show a ring 1 made out of a body 2 and in the shape of a ring, and a setting 3 carrying precious stones and/or any other decorative design.

20           In this invention, this supporting setting 3 is surmounted by an ornament 4 shaped so as to hide only certain parts of the precious stones and/or of the decorative design of the setting 3 and fitted with a mechanism responsible for pivoting about the axis perpendicular to the face of the setting and automatic locking at each stage of the rotation of the piece 4.

25           In the preferred mode of assembly, the supporting setting 3 has different sectors 5 of precious stones and/or of design so that the size and shape of each sector is similar to each of the protruding parts 6 of a central ring 7 which composes the ornament 4.

This ornament 4 has at least one protruding part 6 intended to hide at least one of the sectors 5 that are arranged in a regular fashion on the setting 3. So, as an example, the ring 1 represented on Figures 1 and 2 has three protruding parts 6 on the ornament 4 and nine sectors 5 of precious stones.

One will note that protruding parts 6 of the ornament 4 can also be fitted with precious stones and/or ornamental designs so as to create, with the different colors of stones forming the setting 3, a ring that can be changed to accommodate with one's outfit, for example.

As shown on figures 3a and 3b, the shape of the protruding parts 6 of the ornament 4 can be of very diverse shape and size.

As illustrated in Figure 2, the mechanism of pivoting and automatic locking is advantageously composed of an axis formed, for example, of a notch 8 situated at the center of the ornament 4, of a bolt 9, of an elastic element 10 intended to fasten the ornament 4 to the setting 3, and of a locking system to stop the rotation at each sector. The locking system is composed of notches 11 and of juxtaposed slopes 12 arranged on the setting 3 and work using "V"-shaped ridges of the ornament 4 that are able to seat themselves into a notch 11, and, under the force of the elastic element 10, stop rotation.

Each sector 5 of the setting 3 has a notch 11 and a pair of slopes 12 placed close to notch 11, forming, therefore, a notch locking system when the ornament 4 is rotating.

One can then understand that in order to change the appearance of the ring 1 by hiding certain designs

and/or stones, it is sufficient to press gently clockwise or counter-clockwise on the ornament 4 so as to make it rotate until the hidden designs appear and those situated next, according to the direction of rotation, disappear, engaging at the same time the ridges of the ornament 4 in the notches 11 of the sectors 5 of the setting 3 now hidden.

Such a change in the design can be made at will, that is to say, at any moment and, without even removing the ring from the finger. This will result in a rapid modification of the aesthetic appearance of the ring. Moreover, it is possible to fit on the setting a design of precious stones on certain sectors only, so as to enable one to hide them with the ornament, sheltering them from the interest of potentially ill-intentioned individuals.

Note that the mechanism responsible for pivoting and locking is entirely hidden by the central part of the ornament.

Shown in Figure 4, is a variant of assembly of the pivoting and locking mechanism of the ornament 4 that consists of two cylindrical pieces 13 and 14 mounted coaxially, one of which 13 is attached to the setting 3, the other 14 attached to the ornament 4, and both axially fixed by a clip 15 such that the free rotation of one 14 of the cylindrical portions relative to the other 13 is resisted by the presence of an elastic element 16 protruding from the body of the cylindrical portion 14 of the ornament 4 so that it is seated 17 onto each sector 5 of precious stones and/or design of the setting 3.

Notice that the elastic element 16 is concealed in the body 14 of the ornament 4 by compression when it is pulled by the rotation until it meets an element 17 corresponding to a design that will be hidden by the ornament.

Understand then that the piece of jewelry described by this invention is relatively simple to produce and enables the simple creation of at least two difference pieces of jewelry with only one base.

- 5           Even though the invention has been described with two modes of assembly of a ring in particular, it provides for all the equivalent techniques of the described instructions. This is why the piece of jewelry described by this invention can apply to a ring, a broach, earrings, or similar items.